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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,706	03/30/2001	Ed H. Chi	108548	4477

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EXAMINER	
NGUYEN, HAI V	

ART UNIT	PAPER NUMBER
2142	

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/820,706	CHI ET AL.	
	Examiner	Art Unit	
	Hai V. Nguyen	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 March 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/30/2001*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the application filed on 30 March 2001.

2. Claims 1-12 are presented for examination.

Claim Objections

3. Claims 6, 8-12 are objected to because of the following informalities:

Claims 8-12 depend on claim 6 which is the method claim while claims 8-12 are system claims. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Brown** et al U.S. patent no. **5,875,446** in view of **Pirolli** et al. U.S. patent no. **5,835,905**.

6. As to claim 1, Brown discloses a method for predicting usage of a collection of content portions *(Brown, objects)* comprising:

entering a user information need, a requested user starting location and a requested number of iterations *(Brown, col. 12, line 63 – col.13, line 61)*;

determining the connection topology *(Brown, relationship structure)* of the collection of content portions *(Brown, col. 9, line 48 – col. 10, line 42)*;

for each connection determined, determining proximal information cue words *(Brown, relevant objects)* associated with each connection, storing at least one of the

proximal information cue words based on the connection *(Brown, Figs. 7A-B, col. 6, line 31 – col. 7, line 25)*; However, Brown does not explicitly disclose determining a predicted user presence in the collection of content portions by determining similarity between the stored proximal information cue words and the user information need. Thus, the artisan would have been motivated to look into the related networking arts for potential methods and apparatus for implementing determining a predicted user presence in the collection of content portions by determining similarity between the stored proximal information cue words and the user information need.

In the same field of endeavor, Pirolli, related System For Predicting Documents Relevant To Focus Documents By Spreading Activation Through Network Representations Of A Linked Collection Of Documents, discloses determining a predicted user presence in the collection of content portions by determining similarity between the stored proximal information cue words and the user information need *(Pirolli, col. 7, line 35 – col. 8, line 58).*

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Pirolli's teachings of predicting the collection of content portions *(Pirolli, Abstract, col. 1, line 65 – col. 2, line 37; col. 7, line 35 – col. 8, line 58) with the teachings of Brown*, for the *purpose of producing a search result that includes both topically and structurally relevant objects and easily identifying and exploiting the relationships between the objects on the web document or on the hit-list (Brown, col. 4, lines 9-17).* Brown also suggests in Fig. 8 that *the Relationship Catalog 410 is a table containing rows 415 for the purpose of cataloging*

the relationships in the object collection and determining which particular relationships are to be used to process the current query (Brown, col. 12, lines 12-39). Pirolli also suggest that *Categorization techniques typically attempt to assign individual elements into categories based on the features they exhibit. Based on category membership, a user may quickly predict the functionality of an element. For instance, in the everyday world, identifying something as a "chair" enables the quick prediction that an object can be sat on. The techniques described herein will thus rely on the particular features that can be extracted about Web pages at a Web locality (Pirolli, col. 8, line 8 – col. 9, line 6).*

Brown-Pirolli discloses determining a user path from the requested user starting location to a final destination based on the user information need based on spreading activation using the predicted user presence in the collection of content portions and the requested starting location for the requested number of iterations *(Pirolli, col. 10, lines 1-54).*

7. As to claim 2, Brown-Pirolli discloses, wherein determining the proximal information cue words comprises determining information cue words forming the connection *(Brown, col. 12, lines 12-39; Pirolli, col. 8, line 8 – col. 9, line 6).*

8. As to claim 3, Brown-Pirolli discloses, further comprising:

If a connection is determined to be an image based connection, determining information cue words from the connected to content portion, the information cue words including at least one of title, words in the connected to content portion, and using the

connected to content portion information cue words as proximal cue words for the image link *(Brown, Fig. 6A, item 235, col. 8, lines 12-21)*.

9. As to claim 4, Brown-Pirolli discloses, wherein the connection topology information is stored in a matrix *(Brown, Fig. 8, items 410, 450)*.

10. As to claim 5, Brown-Pirolli discloses, wherein the information about proximal information cue words is stored in a word/document matrix *(Pirolli, Fig. 6; Brown, Fig. 6A)*.

11. As to claim 6, Brown-Pirolli discloses, further comprising:

determining a weighted term frequency for each word in the collection of content portions; and wherein determining a predicted user presence in the collection of content portions comprises: determining a similarity between the stored proximal information cue words, the weighted frequency for each word and the user information need *(Pirolli, Figs. 5, 6; col. 8, line 7 – col. 9, line 67; Brown, Fig. 6A; Figs. 8, 9; col. 11, line 33 – col. 12, line 52)*.

12. Claim 7 is corresponding system claim of claim 1; therefore, it is rejected under the same rationale as in claim 1.

13. Claims 8-12 are similar limitations of claims 2-6; therefore, they are rejected under the same rationale as in claim 2-6.

14. Further references of interest are cited on Form PTO-892, which is an attachment to this action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai V. Nguyen whose telephone number is 703-306-0276. The examiner can normally be reached on 6:00-3:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on 703-305-9705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JACK D. HARVEY
SUPERVISORY PATENT EXAMINER

Hai V. Nguyen
Examiner
Art Unit 2142